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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/780,593	02/18/2004	Floyd Backes	160-056	3377
34845	7590	07/24/2006	EXAMINER	
McGUINNESS & MANARAS LLP 125 NAGOG PARK ACTON, MA 01720			PHILPOTT, JUSTIN M	
			ART UNIT	PAPER NUMBER
			2616	

DATE MAILED: 07/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/780,593

Applicant(s)

BACKES, FLOYD

Examiner

Justin M. Philpott

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 07 June 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-7 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

DETAILED ACTION

Response to Arguments

1. Applicant's arguments with respect to claims 1, 5 and 7 have been considered but are moot in view of the new ground(s) of rejection. Specifically, the newly added claim limitations are taught by the newly recited reference of Kimura as discussed in the following office action.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 3-5 are rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent Application Publication No. US 2004/0054767 A1 by Karaoguz et al. in view of U.S. Patent Application Publication No. US 2005/0117524 A1 by Lee et al., further in view of U.S. Patent Application Publication No. US 2001/0048744 A1 by Kimura.

Regarding claim 1, Karaoguz teaches a method for use in an access point (e.g., access points 410a-n, see FIG. 4) in a wireless communications environment including multiple access points (e.g., access points 410a-n in FIG. 4) and stations (e.g., wireless devices 415a-n), wherein stations gain network access by associating with one or more of the access points (e.g., see paragraph 0021), comprising: at each of a plurality of access points (e.g., access points 410a-n in FIG. 4) within communication range of stations (e.g., wireless devices 415a-n), repeatedly

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executing the steps of collecting bid messages (e.g., see paragraphs 0029-0036 regarding access points gathering location and identity information of the wireless devices and transmitting range messages to the stations), each bid message (e.g., comprising location and identity information) including a parameter related to the distance between the access point and the station (e.g., see paragraph 0033 regarding range message comprising location information indicating the distance range; see also paragraph 0041-0042 regarding location information); and sending an accept message (e.g., range message acknowledgement) from which a bid message was received, the accept message for causing the station to associate with the access point (e.g., see paragraphs 0033-0036 wherein the wireless device further establishes communication with the access point). However, Karaoguz teaches the *station* (not the access point) comprises the functional elements for causing the access point-to-station association (e.g., wherein bid messages are sent from the access point, instead of the station; and accept messages are sent from the station, instead of the access point). Furthermore, Karaoguz may not specifically disclose the bid messages are from stations not currently associated with the access point or selecting only a subset of the bid messages.

Lee, like Karaoguz, also teaches a method for use in an access point in a wireless communications environment (e.g., see abstract), and further, specifically teaches an access point comprises the functional elements for causing the access point-to-station association (e.g., see FIG. 6 and paragraphs 0064-0067 regarding functions performed by access point AP). Still further, Lee teaches bid messages are received from stations not currently associated with the access point (e.g., STA sends a reassociation request message to AP_B while most recently being associated with AP_A, see FIG. 5 and paragraphs 0058-0062). Additionally, the bid

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messages in Lee are indicative of a request to associate (e.g., see FIG. 5 regarding reassociation requests), and selecting at least one of the bid messages (e.g., requests) is based at least in part on a parameter relating to distance (e.g., see paragraph 0044 regarding “distance between APs should be considered”). Finally, the teachings of Lee provide both a secure quality of service and a high-speed roaming service for IEEE 802.11 communications (e.g., see paragraphs 0068-0069). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the IEEE 802.11 communications teachings of Lee to the IEEE 802.11 communications method of Karaoguz (e.g., see Karaoguz, paragraph 0016 regarding IEEE 802.11) in order to provide station/access-point communications with a secure quality of service and a high-speed roaming (e.g., see paragraphs 0068-0069).

Also, Kimura, like both Karaoguz and Lee, teaches a method for use in an access point in a wireless communications environment (e.g., see abstract), and further specifically teaches selecting only a subset of the bid messages based at least in-part on the at least one parameter (see paragraphs 0049-0053 and step S34 of FIG. 4 regarding issuing a rejection message for the messages that do not pass the authentication/ association requirements, whereby only those messages passing the authentication/association requirements would then be selected by way of step S33 in FIG. 4), and selecting and message collecting is executed by the access point (e.g., see paragraph 0042 regarding “authentication/association processing means 13 in the access point device”). Additionally, the teachings of Kimura provide access point/mobile station communications with a “significant improvement in security level” (Kimura at paragraph 0056). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the access point/mobile station communication method teachings of Kimura to the access

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point/mobile station communication method of Karaoguz in view of Lee in order to provide access point/mobile station communications with a “significant improvement in security level” (Kimura at paragraph 0056).

Regarding claim 3, while Karaoguz may not specifically disclose sending an accept message only if a maximum number of associations has not been exceeded, Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the number of permissible associations in the network cannot be exceeded. Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to send an accept message only if a maximum number of associations has not been exceeded, since Karaoguz further teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the number of permissible associations in the network cannot be exceeded. Furthermore, claim 3 was rejected in the previous office action by the Examiner taking official notice that the limitations recited in this claim is well known in the art. In Applicant’s response to the previous office action, Applicant has not traversed the Examiner’s assertion of official notice or Applicant’s traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

Regarding claim 4, Karaoguz teaches maintaining a table including an entry for each station from which a bid message (e.g., range message) has been received, each entry including the parameter (e.g., see paragraph 0043 regarding storage of location information within central server).

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Regarding claim 5, Karaoguz teaches the method discussed above regarding claim 1 and further, teaches maintaining a table including an entry for each station from which a bid message has been received, each entry including the parameter (e.g., see paragraph 0043 regarding storage of location information within central server). Further, while Karaoguz may not specifically disclose the accept message is sent to the device having the parameter indicating the closest distance, Karaoguz teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045), wherein it is implicit that the closest device is selected for association in order for the system to operate efficiently. Thus, at the time of the invention it would have been obvious for the accept message in Karaoguz to be sent to the device having the parameter indicating the closest distance, since Karaoguz teaches network optimization is performed (e.g., see paragraphs 0027-0028 and 0045) and it is implicit that the closest device is selected for association in order for the system to operate efficiently. Furthermore, claim 5 was rejected in the previous office action by the Examiner taking official notice that the limitations recited in this claim is well known in the art. In Applicant's response to the previous office action, Applicant has not traversed the Examiner's assertion of official notice or Applicant's traverse is not adequate. Therefore, in accordance with MPEP 2144.03(C), the limitations recited in these claims comprise well-known art and are hereafter taken to be admitted prior art.

4. Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lee in view of Kimura, further in view of U.S. Patent No. 6,266,537 to Kashitani et al.

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Regarding claim 2, Karaoguz in view of Lee in view of Kimura teaches the method discussed above regarding claim 1, however, may not specifically disclose an accept message is sent to the station whose bid message includes the parameter indicating the closest distance.

Kashitani also teaches a method for associating stations and access points, and specifically discloses associating occurs when the parameter received indicates the closest distance (e.g., see col. 7, lines 23-32 – col. 8, line 58 regarding polling response signals responding to long-distance ranges or short-distance ranges). The teachings of Kashitani provides reduced interference and increased reliability for wireless transmissions (e.g., see col. 3, line 47 – col. 4, line 26). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the teachings of Kashitani to the method of Karaoguz in view of Lee in view of Kimura in order to provide reduced interference and increased reliability for wireless transmissions.

5. Claims 6 and 7 are rejected under 35 U.S.C. 103(a) as being unpatentable over Karaoguz in view of Lee in view of Kimura, further in view of U.S. Patent Application Publication No. US 2004/0121749 A1 by Cui et al.

Regarding claims 6 and 7, Karaoguz in view of Lee in view of Kimura teach the method discussed above regarding claim 1, however, may not specifically disclose selecting stations' bid messages is based at least in part on an indication of data rate to the station by the access point with which the station is currently associated, or selecting the lowest data rate.

Cui, like Karaoguz and Lee, also teaches wireless communications between stations (e.g., clients 102) and an access point (e.g., host 100), and further, specifically teaches the access point

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selects the station at least in part on an indication of data rate to the station by the access point with which the station is currently associated (e.g., see paragraph 0049), and also selecting the lowest data rate (e.g., see paragraph 0009 regarding allowing access by stations 316, 318, 320 and 322 having the lowest data rates of 1Mbps; and see Table 1 and paragraph 0034 regarding allocating a specific channel for stations communicating at the lowest data rate of 1Mbps). Additionally, the teachings of Cui provide improved system throughput (e.g., see paragraphs 0010-0014). Thus, at the time of the invention it would have been obvious to one of ordinary skill in the art to apply the wireless communication teachings of Cui to the wireless communication method of Karaoguz in view of Lee in view of Kimura in order to provide improved system throughput (e.g., see paragraphs 0010-0014).

Double Patenting

6. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

7. A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

8. Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-7 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-6 of copending

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Application No. 10/781,525. Although the conflicting claims are not identical, they are not patentably distinct from each other because each recites logic performing identical functions. Specifically, Application No. 10/781,525 comprises claims which are broader versions of the instant application such that all of the limitations from independent claim 1 of Application No. 10/781,525 are included in independent claim 1 of the instant application. In particular, at the time of the invention it would have been obvious to one of ordinary skill in the art to collect bid messages from stations which may or may not be currently associated with an access point, instead of being limited to collecting bid messages from stations currently associated with the access point, in order to provide a system with enhanced operation for accommodating a greater number of access point communications.

10. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Conclusion

11. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a).

Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

12. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Justin M. Philpott whose telephone number is 571.272.3162. The examiner can normally be reached on M-F, 9:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on 571.272.3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.



Justin M. Philpott



CHI PHAM
SUPERVISORY PATENT EXAMINER

7/20/06